APR 1 5 2004 WE TO:

April 5, 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572 28 Davis Avenue Poughkeepsie, N.Y. 12603

Subject:

Serial No. 10/790,925 03/02/04

Ta-Lee Yu

BIPOLAR ESD PROTECTION STRUCTURE

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation
In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 12, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

TSMC-00-068BB

The report by J. Chen et al., "Design and Layout of a High ESD Performance NPN Structure for Submicron BiCMOS/Bipolar Circuits," IEEE Journal 1996, 0-7803-2753-5/96, pp. 227-232, describes how ESD efficiency is typically measured by dividing the ESD "threshold" voltage by the area of the ESD protection device and discusses various ESD protection device layouts.

- U.S. Patent 5,850,095 to Chen et al., "ESD Protection Circuit Using Zener Diode and Interdigitated NPN Transistor," describes an electrostatic discharge (ESD) protection circuit.
- U.S. Patent 5,341,005 to Canclini, "Sturcture for Protecting an Integrated Circuit from Electrostatic Discharges," discloses different structures for ESD protection.
- U.S. Patent 5,528,189 to Khatibzadeh, "Noise Performance of Amplifiers," discloses an amplifier with ESD protection with emitter finger layouts.
- U.S. Patent 5,301,084 to Miller, "Electrostatic Discharge Protection for CMOS Integrated Circuits," discusses ESD protection circuits.

Sincerely,

Stephen B. Ackerman,

Req. No. 37761

Form PTO-1449 Doctor (Mumber (Opening) TSMC-00-068BB 10 INFORMATION DISCLOSURE CITATION Argitemi IN AN APPLICATION FHOO Date מיטטף גאז לאיז (Uso soveral shoots if necessary) U. S'. PATENT DOCUMENTS DOCUMENT HUMBER DATE HALL CLLII WECLES Y APPROPRIATE 585009512/15/98 257 361 34100582394 257 173 552818961896 327 314 5301084415194 361 FOREIGN PATENT DOCUMENTS DOCUMENT HUMBER Translatton OUTE COUNTRY cuss SUBCLASS YES OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) ce NPN Structure IEEE Jrn PP. 227 - 232

EXAMPLE DATE CONMOCRED